2005 TRICARE Conference

Fit for Life

Healthy Force, Healthy Families

Healthcare Innovations Program (HIP) Poster Exhibit Winners

LINKING
People and Ideas

Session 042

LTC Christine Merna, AN, USA
Population Health and Medical Management Division,
TRICARE Management Activity

25 January 2005

TRICARE

HIP Categories

- **Access:**

Develop a methodology that matches the Right Patient to the Right Provider at the Right Place and at the Right Time.

- **Cost:**

Accomplish our mission in a cost effective manner that is visible and fully accountable.

- **Quality:**

Ensure benchmark standards for health and healthcare are met while obtaining maximum effectiveness from the resources we are given.

- **Readiness:**

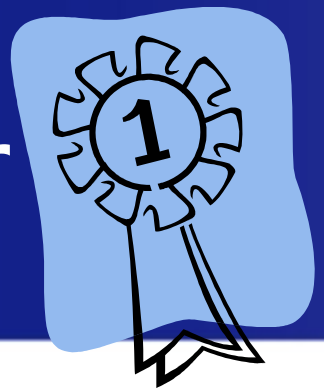
Focus on activities to enhance readiness of military forces and the medical assets that support them.

- **Healthy Lifestyles:**

Promote healthy lifestyles through wellness activities/programs.

2005 TRICARE Conference

Access Winner



Centralization of Overseas and Operational Duty Screening for the San Diego Region

LT Robin Bird, MC,USN

Naval Medical Center
San Diego, California

Fit for Life
Healthy Force, Healthy Families

What the Suitability Screen Includes

- Overseas Screening
- Sea Duty Screening
- Remote Duty
- Operational Duty
- Suitability Determination after a limited duty or physical evaluation board (PEB)

Prior Screening System

- Suitability Screenings done at nine branch clinics throughout the San Diego area
- Additional Screenings done by various civilian physicians, flight surgeons, UMO's and ship GMO's

Problems With Prior System

- Large monetary cost. Inadequate screenings resulted in early return of member or family.
- Multiple visits to medical to complete screen
- Multiple screeners with varying degrees of training
- Inconsistent communication between PSD, screeners and transferring/gaining medical treatment facilities
- Unnecessary administrative separation of active duty members when found unsuitable, and no alternative recommendations made by screener

Process Improvement

- Created a centralized Suitability Screening Center for Naval Medical Center San Diego, outlying Medical Treatment Facilities (MTF) and San Diego Commands

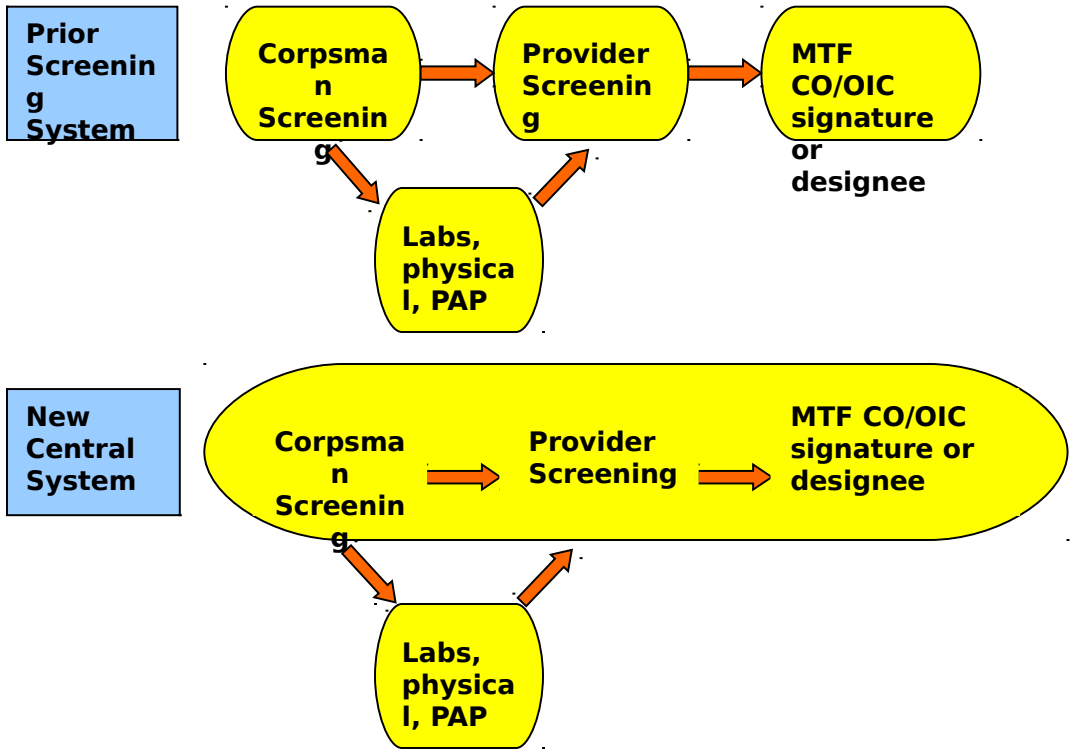
Pilot Center

- Started April 2005
- Included screening for all outlying San Diego commands
- Located at Naval Training Center (NTC)
- Website created for members to download forms
- www.nmcsd.med.navy.mil (under patient care, suitability center under specialty clinics)
- Center completes 500-650 screenings per month and 20-80 physical exams.

Outcomes

- Consistent Screening Process for San Diego area
- Large monetary savings:
  - 6 families returned in 9 months prior to opening
  - None returned in first 9 months of operation
- Increased flexibility (5-10 walk-in screens per day)
- Consistent POC for PSD and commands for difficult cases
- Positive feedback from remote, operational, overseas and ship commands with the increased communication and input they have in screening process.
- Medical visits decreased by 66% (from 3 to 1)
- Time lost from work decreased by 50% (2hr to 1hr)

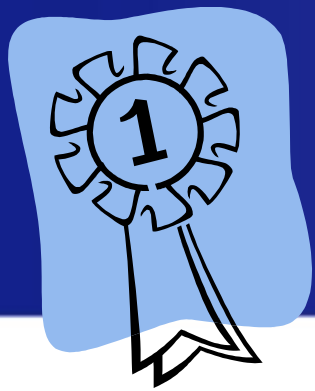
Outcomes Comparison: # visits to medical



- **Each yellow circle represents one visit to medical**
- **Prior system**
  3-4 visits
- **Centralized system**
  1-2 visits

2005 TRICARE Conference

Cost Winner



Population Health Based Disease Management Clinic

Ms. Gina Moore, RN, BSN,
CPUR, CPUM

McDonald Army Community Hospital
Fort Eustis, Virginia

Fit for Life
Healthy Force, Healthy Families

Program Structure

- Adult/Pediatric Asthma, Diabetes, HTN, Anticoagulation, TUC, Pilot site for CVD (DOD/VA CPGs)
- Interdisciplinary Care Team
- RN managed patient education clinic
- PCM involvement
- Internal Medicine oversight
- Population Health reports used to identify high risk patients

Clinical Outcomes

- Average HgbA1c for facility is 7.07.
- 98% of diabetics with HgbA1c less than 9.0%
- 90% of asthmatics on long term controllers/inhaled steroids.
- ORYX data congruent with MCACH data
- Outcomes based on entire population not sampling of records.

Cost Savings

	Entire MCACH Population	**DMC Population**
Inpatient Admissions FY02 to FY03-Volume	4% Decrease	63% Decrease
Inpatient Costs FY02 to FY03 (Purchased Care)	4% Increase	55% Decrease
ER Visits Volume FY02 to FY03	21% Increase	17% Decrease
ER Visit Cost (Purchased Care)	32% Increase	3% Decrease

Decrease in per visit expense in the Internal Medicine Clinic
$46 to $61 per visit in DMC.
$141-$161 per visit saved on Internal Medicine cost.
Redistribution of staff, equipment and supplies from other clinics
Use of Medical assistants and clerks

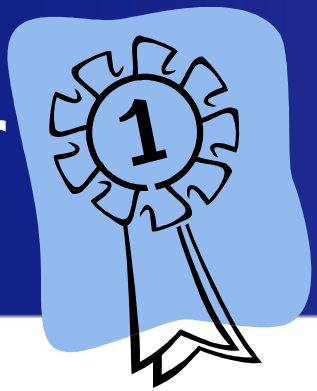
MCACH'S Team

- Primary Care Managers
- Disease State Program Managers-Registered Nurses
- Internal Medicine
- Dietician
- Physical Therapy
- Respiratory Therapy
- Clinical Pharmacist
- Medical Assistant and Clerk
- Utilization Management Coordinator
- Behavioral Health
- Baylor Resident

❖ **Every team member's contribution leads to the overall outcomes resulting in improved quality of life for the patients and efficient programs for the facility.**

2005 TRICARE Conference

Quality Winner



Innovations at the Deckplate: Population Health

CDR Cynthia Gantt, NC, USN

Naval Medical Center
San Diego, California

Fit for Life
Healthy Force, Healthy Families

Contributors

- CDR Emory Fry, MC, USNR
- CDR Sharon McDonald, MSC, USN
- Julie Neely, MD, MPH
- LCDR Kristin Klemann, MSC, USN
- Ian Villafana, MPA
- Sandra Gharabaghli, RN, MA
- Chisun Chun, MPH

NMCSD Population-Based Health Care Model

Chartered Population Health Clinical Quality Teams (CQT): Identify-Educate-Outcomes, Metrics & Tools

Annual Plan Goal

Targeted Populations

1. **Diabetes**
2. **Asthma**
3. **Chronic Heart Failure**

Population Health Department:
Coordinates & Collaborates with:
CQTs, CMTs &
Dept of Application Development
Provides Training & Support to Clinics
Command-Level Analysis & Evaluation

Clinic Management Teams (CMT):
Execute-Analyze-Initiate Best Clinical & Business Practices Evaluate Healthcare Team Performance using Clinical Metrics

Selected Innovations

- Easy CHCS portal at point-of-care:
  - Decision support during patient encounters with clinical alerts
  - Lists of patients with alert status for each PCM
- Standardized disease registries' reports
- Metrics displayed on NMCSD intranet Performance Dashboard
- Required on-line clinical management training with CME for all PCMs

Selected Innovations

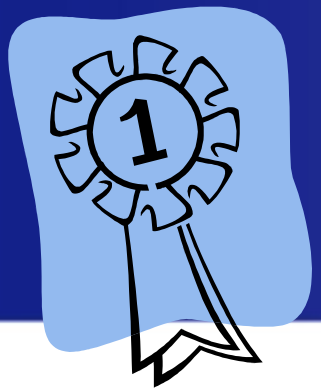
- CHCS Patient Appointing Mailer System pilot for high-risk diabetics
  - Also addresses PCM assignment issues
- TriWest Disease Management Program Collaboration for high-risk diabetics
- Embedded in formal Clinic Management Team structure:
  - Senior Clinic Nurses lead & report progress of Population Health initiatives

Point of Contact

CDR Cynthia J. Gantt, NC, USN
Head, Population Health Department
Naval Medical Center San Diego
cjgantt@nmcsd.med.navy.mil

2005 TRICARE Conference

Readiness Winner



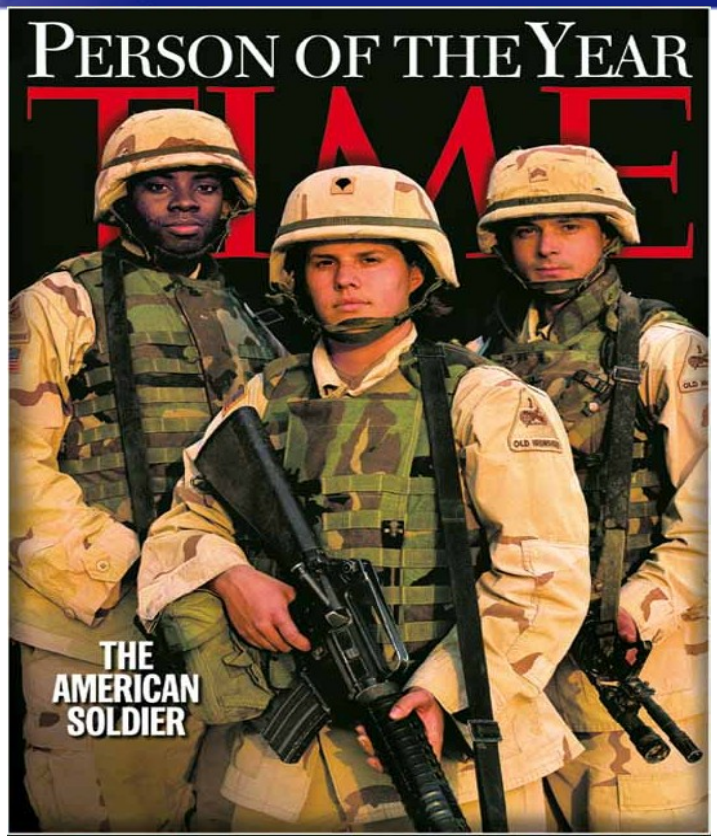
Can Population Health Data help the U.S. Army prepare troops for Combat?

COL Suzanne Cuda, MC, USA

Brooke Army Medical Center
San Antonio, Texas

Fit for Life
Healthy Force, Healthy Families

STUDY GOAL



To examine the health effects of deployment from a utilization and disease prevalence perspective

Background

- **Currently, there are no surveillance mechanisms in place to determine health effects of deployment across the spectrum of coded diagnoses**
- **Forces deployed to operation Iraqi Freedom and Enduring Freedom reported more ill health upon return that prior to their departure (Simmons, et al., 2004)**
- **Porter (2004) suggests a definite lack of specificity and quantitative data applicable to soldier diseases such as post-war illness.**
- **This study is intended as a catalyst for more effective prevention and treatment programs which will reduce the burden of post conflict, war illness.**

Methods

- **All Active Duty Army direct outpatient visits to a Military Treatment Facility were pulled from M2 beginning with FY02 through FY04.**
- **Data was imported into MedBase, a robust multipurpose clinical tool whose data engine was used for analysis.**
- **Cohort was any soldier who utilized direct outpatient services and had a post deployment diagnosis code of v705.6 used to identify post deployment related diagnosis.**

Data Management

- **Data was segregated into two data sets.**
  - **included only unique diagnoses per soldier evaluating prevalence of disease and injury.**
  - **included all diagnosis within the cohort to evaluate utilization rates.**
- **Diagnosis was categorized by 3 code range levels in accordance with International Classification of Diseases, Ninth Revision.**
- **The utilization rate of pre and post deployment diagnosis was compared and expressed as rate difference percentage.**

Conclusions

- **<u>Population</u>: 53,598 redeployed Active Duty Army members during FY03 were evaluated.**
- **<u>Findings</u>**
  - ***Prevalence:*** **200,874 diagnoses were coded for 1 year *prior* to the 1st V705.6 and 356,523 diagnoses coded for 1 year *post* deployment which represents a 78% increase of visits in the population.**
  - ***Utilization:*** **Significant increases were reflected in musculoskeletal system and connective tissue diseases along with mental health services. Changes in staffing or a shift to network care may be required. Healthcare facilities should use this type of information for resource planning.**

2005 TRICARE Conference

Point of Contact

Soldier Health Initiative

Col Suzanne E. Cuda, MC

Chief, Department of Health Care Operations

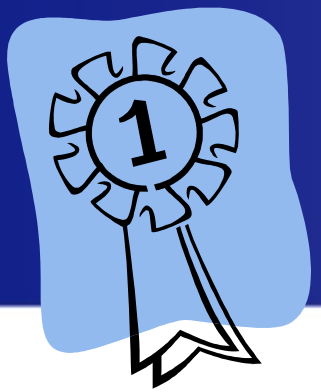
Brooke Army Medical Center, San Antonio, TX

Director of San Antonio Multi Service Market

Suzanne.Cuda@amedd.army.mil

2005 TRICARE Conference

Healthy Lifestyles Winner



GAMEPLAN

Ms. Catherine Ling, RN, MN, FNP

Naval Health Care New England
Naval Ambulatory Care Clinic
Groton, Connecticut

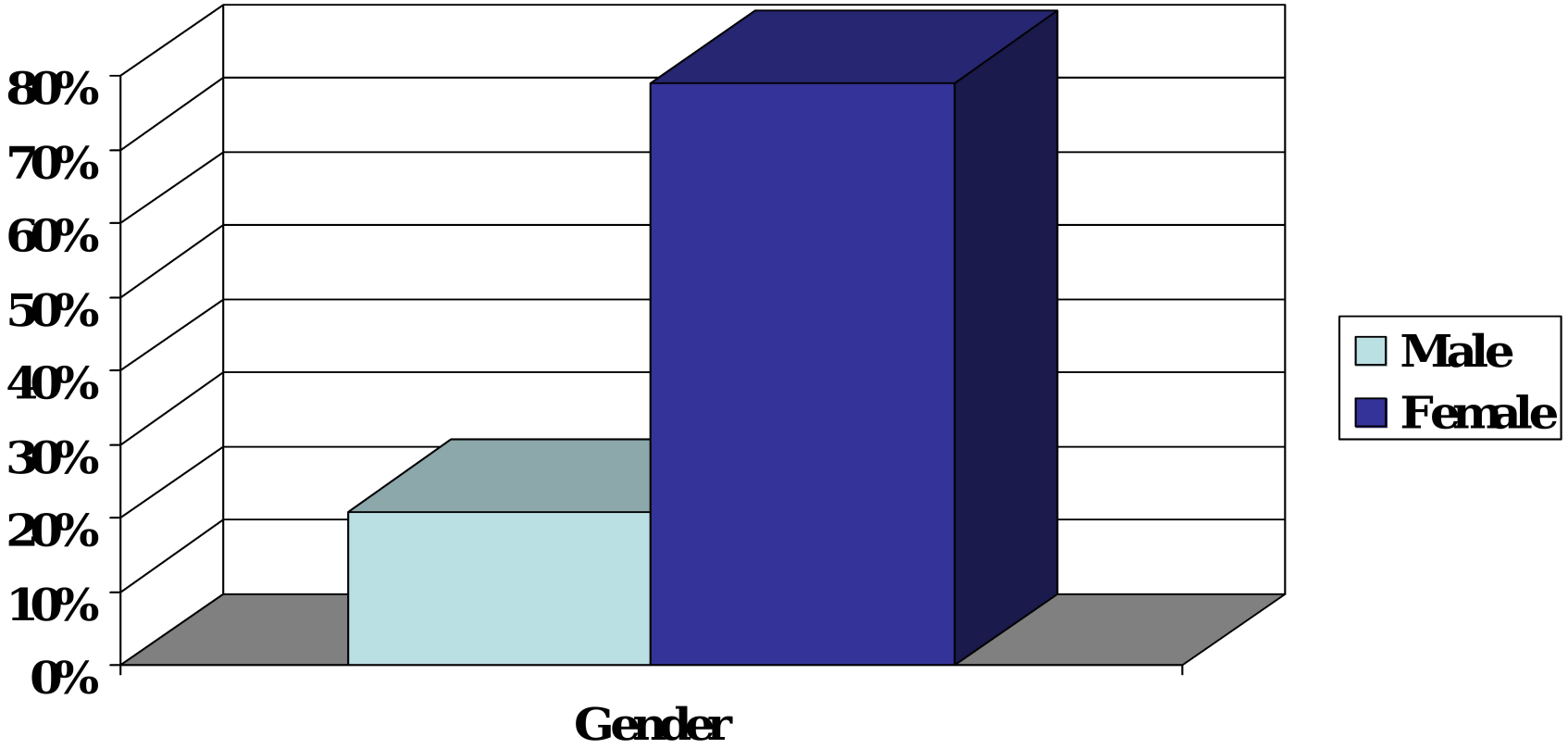
Fit for Life
Healthy Force, Healthy Families

GAMEPLAN Program

- GAMEPLAN is a NIH program that NHCNE NACC Groton has adapted to help clients enact therapeutic lifestyle modification. GAMEPLAN is a multidisciplinary, client-centered treatment, which builds upon existing personnel and programs. Clients set a series of small achievable goals and are then held accountable. This program has been in place for one year.

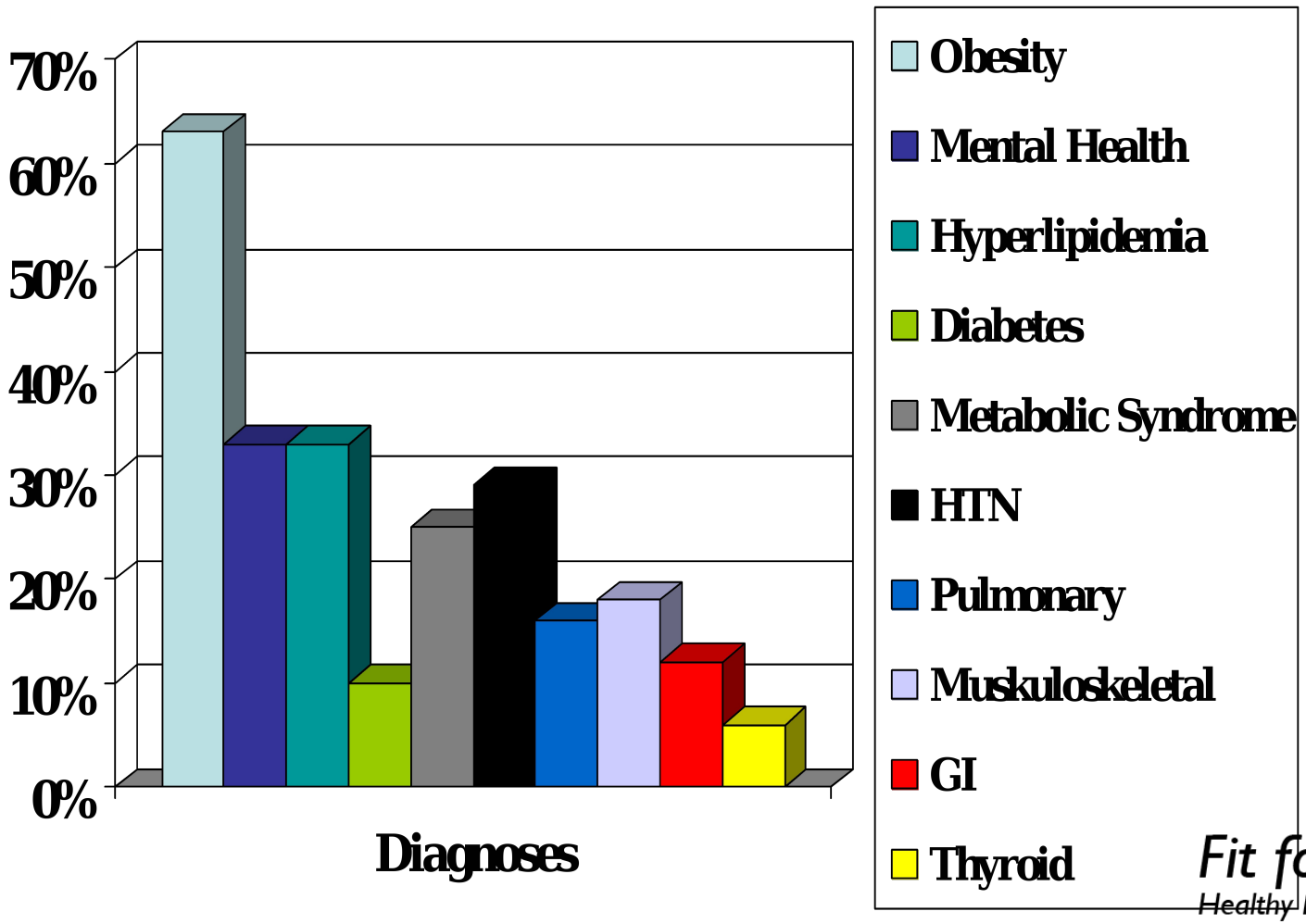
2005 TRICARE Conference

GAMEPLAN Outcomes



Fit for Life
Healthy Force, Healthy Families

GAMEPLAN


70%
60%
50%
40%
30%
20%
10%
0%
Diagnoses
Obesity
Mental Health
Hyperlipidemia
Diabetes
Metabolic Syndrome
HTN
Pulmonary
Muskuloskeletal
GI
Thyroid

GAMEPLAN

- Average Weight Change
  - Participant: Lost 5
  - Nonparticipant: Lost 2
- Average BMI Change
  - Participant: Decrease 0.5
  - Nonparticipant: Decrease 0.4
- Average Change in Blood Glucose
  - Participant: Decrease 2
  - Nonparticipant: Decrease 1
- Average Change in Blood Pressure
  - Participant: Decrease 2/3
  - Nonparticipant: Decrease 2/3

GAMEPLAN

- Average Change in Total Cholesterol
  - Participant: Decrease 13
  - Nonparticipant: Increase 37
- Average Change in LDL
  - Participant: Decrease 13
  - Nonparticipant: Decrease 3
- Average Change in HDL
  - Participant:Decrease 4
  - Nonparticipant: Decrease 5
- Average Change in Triglycerides
  - Participant: Decrease 31
  - Nonparticipant: Decrease 12

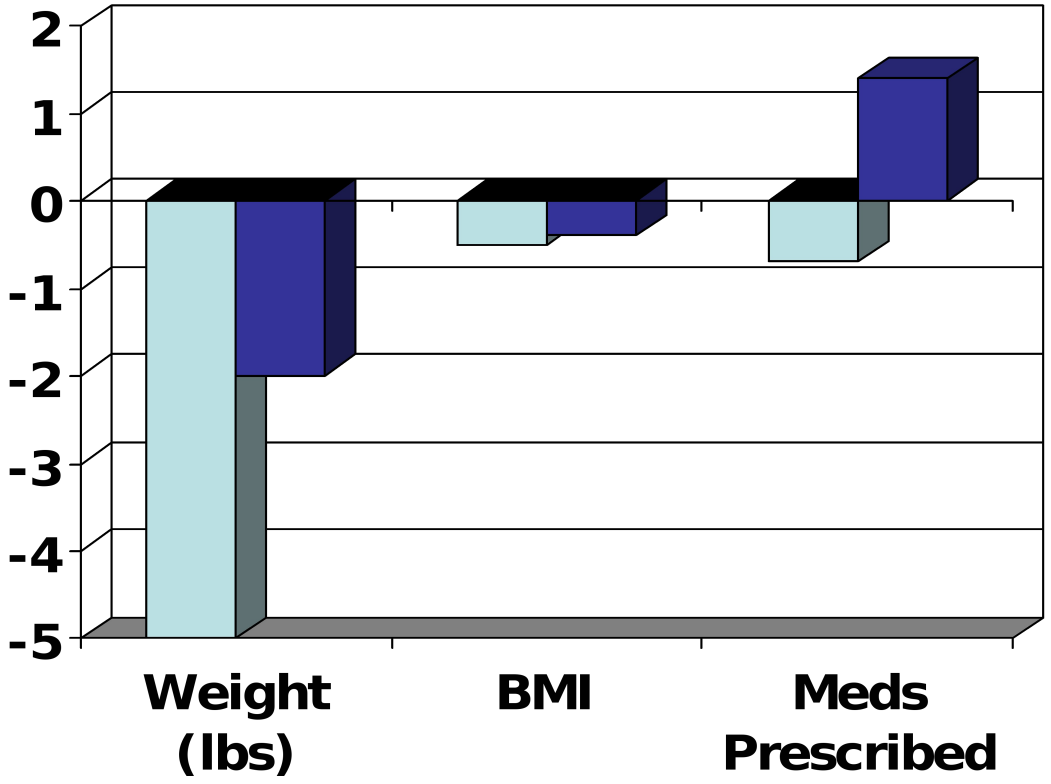
GAMEPLAN

- Change in Number of Medications Prescribed:
  - While enrolled in GAMEPLAN:
    - Decreased 0.7
  - If referred and did not participate:
    - Increased 1.4

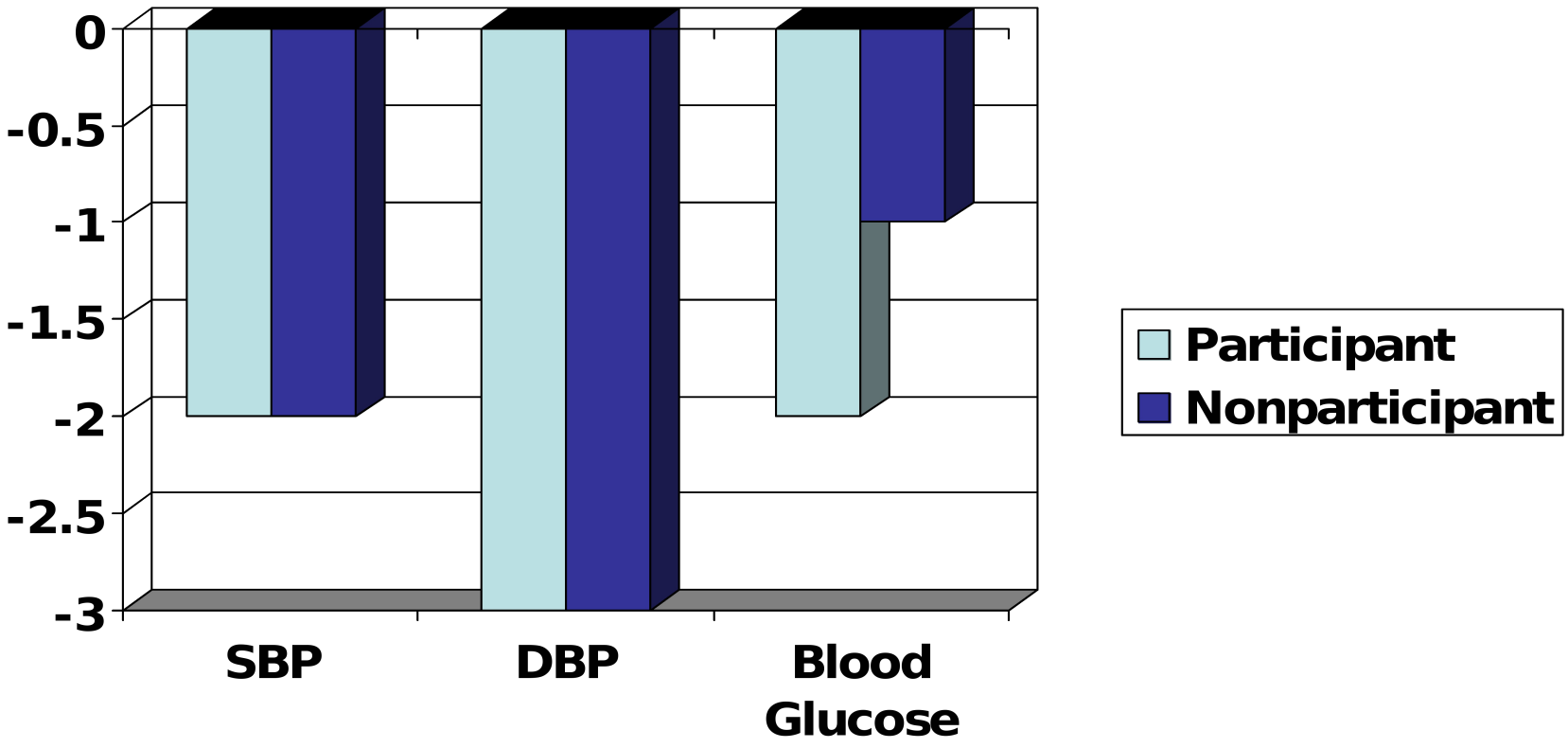
GAMEPLAN

- Further questions for study:
  - What effect does participation have on number of PCM visits?
  - What correlation, if any, does participant perception of "energy level" have with biometric improvement.
  - What other biometric changes can be measured e.g. percentage body fat, pants/dress size, etc.

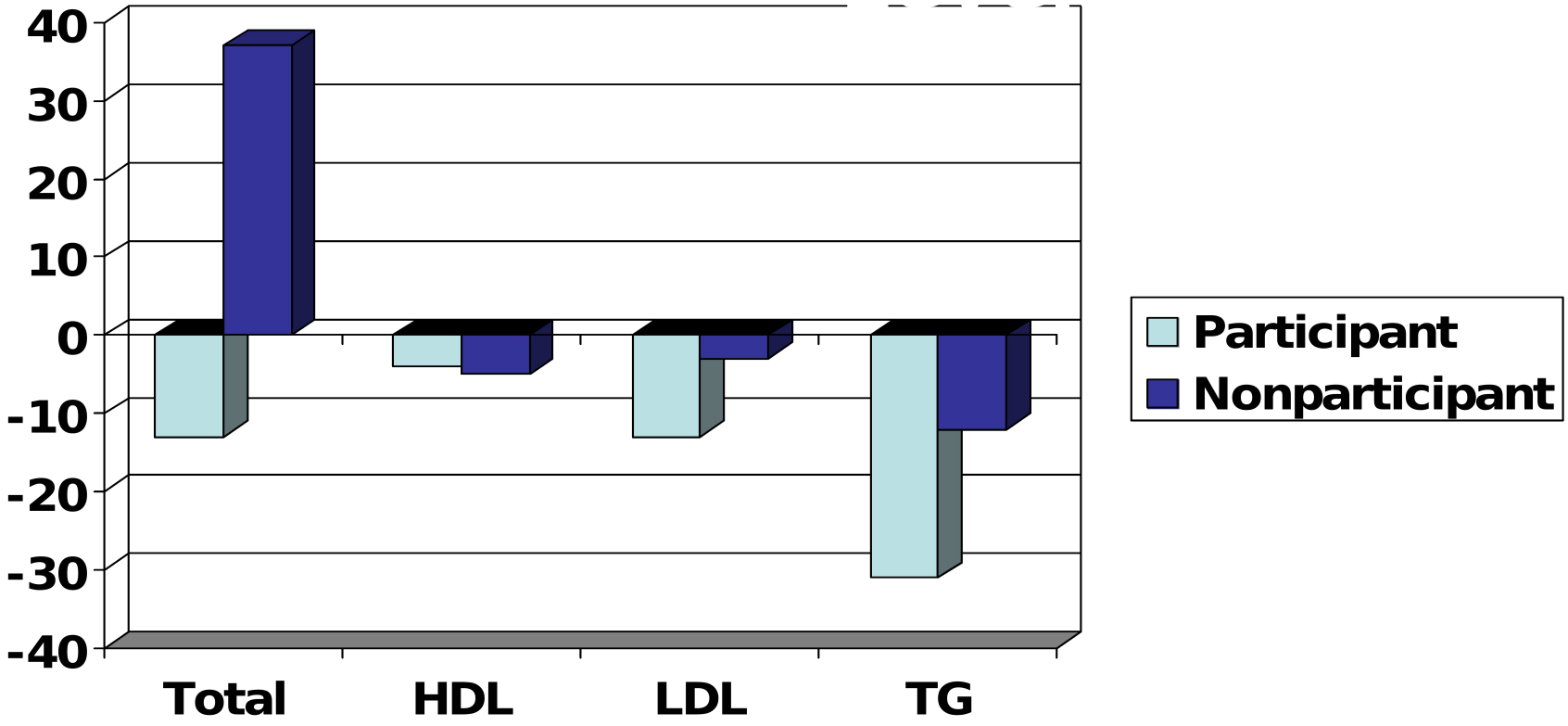
GAMEPLAN Outcomes – Changes in Weight, BMI and Number of medications



GAMEPLAN Outcomes – Changes in Blood Pressure and Glucose



GAMEPLAN Outcomes – Changes in Lipid



Healthcare Innovations Program (HIP)

- To find out more about the program visit the official website for the Healthcare Innovations Program (HIP) at: http://www.tricare.osd.mil/OCMO/innovations.cfm

- PHMMD Support Center website www.dodpopulationhealth.info or www.dodmedicalmanagement.info

Fit for Life
Healthy Force, Healthy Families